



## SEQUENCE LISTING

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RECEIVED  
DEC 28 2001  
TECH CENTER 1600/2900

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THEIR USES

<130> STAN072CON

<140> 09/682,667

<141> 2001-10-04

<150> 09/517,358

<151> 2000-03-02

<150> 09/186,250

<151> 1998-11-04

<150> 60/064,943

<151> 1997-11-07

<160> 18

<170> FastSEQ for Windows Version 4.0

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<211> 642

<212> DNA

<213> r. rattus

<400> 1

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gcgcggcttt	tgcgcgccgg	cctctcctgg	agcgtccag	agcgtgcctc	gcctgccct	180
ggaggacgcc	tggcagaggt	gtgcaccgtg	ctgctgcgct	tgggagatga	gctggagcag	240
atccgtccca	gcgtatatcg	gaatgtggcc	cggcagctgc	acatccccct	gcagtctgag	300
cctgtggtga	ctgatgcctt	cctcgctgtg	gccggccaca	tcttctcagc	aggtatcaca	360
tggggcaagg	tagtgtccct	gtactcgggtg	gctgcgggac	tagcgggtgga	ctgcgtccgg	420
caagctcagc	cagccatggg	tcatgccctg	gttgactgcc	tgggggaatt	tgtacgcaag	480
accctggcca	cctggcttcg	gaggcgtggg	ggatggacgg	acgtcctcaa	gtgtgtgggc	540
agcacagacc	ctggcttccg	ctcccactgg	ctcgtggcca	cactctgcag	ctttggccgc	600
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<211> 213

<212> PRT

<213> r. rattus

<400> 2

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                   20                  25                  30  
 Ala Leu Gly Arg Glu Tyr Val His Ala Arg Leu Leu Arg Ala Gly Leu  
                   35                  40                  45  
 Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu  
                   50                  55                  60  
 Ala Glu Val Cys Thr Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Gln  
   65                  70                  75                  80  
 Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Pro  
                   85                  90                  95  
 Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly  
                   100                  105                  110  
 His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr  
                   115                  120                  125  
 Ser Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro  
                   130                  135                  140  
 Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys  
  145                  150                  155                  160  
 Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu  
                   165                  170                  175  
 Lys Cys Val Val Ser Thr Asp Pro Gly Phe Arg Ser His Trp Leu Val  
                   180                  185                  190  
 Ala Thr Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Leu  
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 Leu Leu Pro Glu Arg  
                   210

<210> 3  
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<220>  
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   1                  5                  10                  15  
  
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 Ala Phe Asp Arg Ser Pro Thr Asp Lys Glu Leu Val Ala Gln Ala Lys  
                   20                  25                  30  
  
 gca cta ggc cgg gag tac gtg cac gcg cgg ctt ttg cgc gcc ggc ctc                   144  
 Ala Leu Gly Arg Glu Tyr Val His Ala Arg Leu Leu Arg Ala Gly Leu  
                   35                  40                  45  
  
 tcc tgg agc gct cca gag cgt gcc tcg cct gcc cct gga gga cgc ctg                   192  
 Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu  
                   50                  55                  60

gca gag gtg tgc acc gtg ctg ctg cgc ttg gga atc aca tgg ggc aag	240
Ala Glu Val Cys Thr Val Leu Leu Arg Leu Gly Ile Thr Trp Gly Lys	
65 70 75 80	
gta gtg tcc ctg tac tgc gtg gct gcg gga cta gcg gtg gac tgc gtc	288
Val Val Ser Leu Tyr Ser Val Ala Ala Gly Leu Ala Val Asp Cys Val	
85 90 95	
cgg caa gct cag cca gcc atg gtt cat gcc ctg gtt gac tgc ctg ggg	336
Arg Gln Ala Gln Pro Ala Met Val His Ala Leu Val Asp Cys Leu Gly	
100 105 110	
gaa ttt gta cgc aag acc ctg gcc acc tgg ctt cgg agg cgt ggt gga	384
Glu Phe Val Arg Lys Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly	
115 120 125	
tgg acg gac gtc ctc aag tgt gtg gtc agc aca gac cct ggc ttc cgc	432
Trp Thr Asp Val Leu Lys Cys Val Val Ser Thr Asp Pro Gly Phe Arg	
130 135 140	
tcc cac tgg ctc gtg gcc aca ctc tgc agc ttt ggc cgc ttc ctg aag	480
Ser His Trp Leu Val Ala Thr Leu Cys Ser Phe Gly Arg Phe Leu Lys	
145 150 155 160	
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35 40 45	
Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu	
50 55 60	
Ala Glu Val Cys Thr Val Leu Leu Arg Leu Gly Ile Thr Trp Gly Lys	
65 70 75 80	
Val Val Ser Leu Tyr Ser Val Ala Ala Gly Leu Ala Val Asp Cys Val	
85 90 95	
Arg Gln Ala Gln Pro Ala Met Val His Ala Leu Val Asp Cys Leu Gly	
100 105 110	
Glu Phe Val Arg Lys Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly	
115 120 125	
Trp Thr Asp Val Leu Lys Cys Val Val Ser Thr Asp Pro Gly Phe Arg	
130 135 140	
Ser His Trp Leu Val Ala Thr Leu Cys Ser Phe Gly Arg Phe Leu Lys	

145 150 155 160  
Ala Ala Phe Phe Leu Leu Leu Pro Glu Arg  
165 170

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Met Glu Val Leu Arg Arg Ser Ser Val Phe Ala Ala Glu Ile Met Asp																	.
1				5					10					15			
gcc ttt gat cgc tgg ccc aca gac aag gag ctg gtg gcc cag gct aaa																	96
Ala Phe Asp Arg Trp Pro Thr Asp Lys Glu Leu Val Ala Gln Ala Lys																	
			20					25					30				
gca cta ggc cgg gag tac gtg cac gcg cgg ctt ttg cgc gcc ggc ctc																	144
Ala Leu Gly Arg Glu Tyr Val His Ala Arg Leu Leu Arg Ala Gly Leu																	
		35					40					45					
tcc tgg agc gct cca gag cgt gcc tcg cct gcc cct gga gga cgc ctg																	192
Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu																	
	50					55					60						
gca gag gtg tgc acc gtg ctg ctg cgc ttg gga gat gag ctg gag cag																	240
Ala Glu Val Cys Thr Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Gln																	
65					70				75							80	
atc cgt ccc agc gta tat cgg aat gtg gcc cgg cag ctg cac atc cct																	288
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Pro																	
				85					90						95		
ctg cag tct gag cct gtg gtg act gat gcc ttc ctc gct gtg gcc ggc																	336
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly																	
			100					105					110				
cac atc ttc tca gca ggt atc aca tgg ggc aag gta gtg tcc ctg tac																	384
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr																	
		115					120					125					
tcg gcg gct gcg gga cta gcg gtg gac tgc gtc cgg caa gct cag cca																	432
Ser Ala Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro																	
	130					135					140						
gcc atg gtt cat gcc ctg gtt gac tgc ctg ggg gaa ttt gta cgc aag																	480
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys																	
145					150				155							160	

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Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu	
165 170 175	
aag tgt gtg gtc agc aca aaa cct ggc ttc cgc tcc cac tgg ctc gtg	576
Lys Cys Val Val Ser Thr Lys Pro Gly Phe Arg Ser His Trp Leu Val	
180 185 190	
gcc aca ctc tgc agc ttt ggc cgc ttc ctg aag gct gca ttc ttc ctc	624
Ala Thr Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Leu	
195 200 205	
ctg ttg cca gag aga tga	642
Leu Leu Pro Glu Arg *	
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<210> 6  
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		20						25					30				
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu		
		35					40						45				
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu		
	50					55					60						
Ala	Glu	Val	Cys	Thr	Val	Leu	Leu	Arg	Leu	Gly	Asp	Glu	Leu	Glu	Gln		
65					70					75					80		
Ile	Arg	Pro	Ser	Val	Tyr	Arg	Asn	Val	Ala	Arg	Gln	Leu	His	Ile	Pro		
				85					90					95			
Leu	Gln	Ser	Glu	Pro	Val	Val	Thr	Asp	Ala	Phe	Leu	Ala	Val	Ala	Gly		
			100					105						110			
His	Ile	Phe	Ser	Ala	Gly	Ile	Thr	Trp	Gly	Lys	Val	Val	Ser	Leu	Tyr		
		115					120						125				
Ser	Ala	Ala	Ala	Gly	Leu	Ala	Val	Asp	Cys	Val	Arg	Gln	Ala	Gln	Pro		
	130					135				140							
Ala	Met	Val	His	Ala	Leu	Val	Asp	Cys	Leu	Gly	Glu	Phe	Val	Arg	Lys		
145					150					155					160		
Thr	Leu	Ala	Thr	Trp	Leu	Arg	Arg	Arg	Gly	Gly	Trp	Thr	Asp	Val	Leu		
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Lys	Cys	Val	Val	Ser	Thr	Lys	Pro	Gly	Phe	Arg	Ser	His	Trp	Leu	Val		
		180						185					190				
Ala	Thr	Leu	Cys	Ser	Phe	Gly	Arg	Phe	Leu	Lys	Ala	Ala	Phe	Phe	Leu		
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Leu	Leu	Pro	Glu	Arg													
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<210> 7  
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<220>  
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 <222> (1)...(513)

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gcc ttt gat cgc tgg ccc aca gac aag gag ctg gtg gcc cag gct aaa      96
Ala Phe Asp Arg Trp Pro Thr Asp Lys Glu Leu Val Ala Gln Ala Lys
          20              25              30

gca cta ggc cgg gag tac gtg cac gcg cgg ctt ttg cgc gcc ggc ctc     144
Ala Leu Gly Arg Glu Tyr Val His Ala Arg Leu Leu Arg Ala Gly Leu
          35              40              45

tcc tgg agc gct cca gag cgt gcc tcg cct gcc cct gga gga cgc ctg     192
Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu
          50              55              60

gca gag gtg tgc acc gtg ctg ctg cgc ttg gga atc aca tgg ggc aag     240
Ala Glu Val Cys Thr Val Leu Leu Arg Leu Gly Ile Thr Trp Gly Lys
          65              70              75              80

gta gtg tcc ctg tac tcg gcg gct gcg gga cta gcg gtg gac tgc gtc     288
Val Val Ser Leu Tyr Ser Ala Ala Ala Gly Leu Ala Val Asp Cys Val
          85              90              95

cgg caa gct cag cca gcc atg gtt cat gcc ctg gtt gac tgc ctg ggg     336
Arg Gln Ala Gln Pro Ala Met Val His Ala Leu Val Asp Cys Leu Gly
          100             105             110

gaa ttt gta cgc aag acc ttg gct acc tgg ctt cgg agg cgt ggt gga     384
Glu Phe Val Arg Lys Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly
          115             120             125

tgg acg gac gtc ctc aag tgt gtg gtc agc aca aaa cct ggc ttc cgc     432
Trp Thr Asp Val Leu Lys Cys Val Val Ser Thr Lys Pro Gly Phe Arg
          130             135             140

tcc cac tgg ctc gtg gcc aca ctc tgc agc ttt ggc cgc ttc ctg aag     480
Ser His Trp Leu Val Ala Thr Leu Cys Ser Phe Gly Arg Phe Leu Lys
          145             150             155             160

gct gca ttc ttc ctc ctg ttg cca gag aga tga                          513
Ala Ala Phe Phe Leu Leu Leu Pro Glu Arg *
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<210> 8  
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 <212> PRT  
 <213> H. sapiens

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 Ala Leu Gly Arg Glu Tyr Val His Ala Arg Leu Leu Arg Ala Gly Leu  
 35 40 45  
 Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu  
 50 55 60  
 Ala Glu Val Cys Thr Val Leu Leu Arg Leu Gly Ile Thr Trp Gly Lys  
 65 70 75 80  
 Val Val Ser Leu Tyr Ser Ala Ala Ala Gly Leu Ala Val Asp Cys Val  
 85 90 95  
 Arg Gln Ala Gln Pro Ala Met Val His Ala Leu Val Asp Cys Leu Gly  
 100 105 110  
 Glu Phe Val Arg Lys Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly  
 115 120 125  
 Trp Thr Asp Val Leu Lys Cys Val Val Ser Thr Lys Pro Gly Phe Arg  
 130 135 140  
 Ser His Trp Leu Val Ala Thr Leu Cys Ser Phe Gly Arg Phe Leu Lys  
 145 150 155 160  
 Ala Ala Phe Phe Leu Leu Leu Pro Glu Arg  
 165 170

<210> 9  
 <211> 12  
 <212> PRT  
 <213> R. rattus

<400> 9  
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 1 5 10

<210> 10  
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 <212> PRT  
 <213> H. sapiens

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<210> 13

<211> 4

<212> PRT

<213> H. sapiens

<400> 13

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<211> 3

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<213> H. sapiens

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<211> 24

<212> PRT

<213> H. sapiens

<400> 15

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<212> PRT

<213> H. sapiens



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